

## HALO H2O

### Trace Moisture Analyzer for Ultra-High-Purity Gases



The HALO trace gas analyzer provides users with the unmatched accuracy, reliability, speed of response and ease of operation that users of Tiger Optics analyzers have come to expect.

Features of the HALO include:

- Tiger Optics' patented Cavity Ring-Down Spectroscopy-based trace gas sensor
- A very compact analyzer footprint
- Ability to measure moisture in most inert, corrosive and toxic gases with just one device
- Freedom from requirements such as periodic sensor maintenance, span calibrations, purifier replacement and pump rebuilds

[HALO H2O Brochure \(PDF\)](#)

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#### HALO H2O -- Specifications

##### Gas Sample Conditions

**Sample Inlet Pressure:** 10 - 125 psig (1.7-9.6 bar)  
**Flow Rate:** up to 1800 sccm  
**Sample Gases:** Most Inert, passive, toxic and corrosive gases  
**Sample Line Temperature:** Up to 60°C

##### Materials of Construction

**Materials of Construction:** 316L stainless steel (optional Hastelloy®)  
**Wetted Components:** 10 Ra surface finish  
**Gas Connection:** 1/4" M VCR Inlet & Outlet  
**Leak Tested to:**  $<2 \times 10^{-8}$  mbar • l /sec

##### Electrical

**Alarm Indicators:** User-programmable set points  
**Power Requirements:** 90-240 VAC 50/60 Hz  
**Power Consumption:** 200 Watts max.  
**Output Signals:** **Recorder:** Isolated 4-20 mA/ 0-5VDC  
**Alarm:** Form-C relay  
**Communications:** RS-422, Wireless (Optional)  
**User Interface:** 5.6" LCD touch screen, 10BaseT Ethernet, RS-232

##### Dimensions

**Mounting:** 8.75" x 8.5" x 23.6" (22.2 cm x 21.6 cm x 59.9 cm)  
**Weight:** 28 pounds (12.7 kg)

##### Performance

**Lowest Detection Limit:** 2 ppb  
**Sensitivity:** 1 ppb  
**Accuracy (greater of):** 4% of reading or  $\pm 1$  ppb  
**Speed of Response (typical):** 95% response <3 minutes  
**Operating Range:** 0 - 20 ppm. Customized higher ranges are available.  
**Environmental Conditions:** 10° - 40°C  
**Storage Temperature:** -10° - 50°C

##### Technology

**Approvals:** CE: LVD & EMC  
**Method:** Cavity Ring-Down Spectroscopy  
**Patents:** U.S. Patent #5,528,040  
Other Patents Pending